

Can These Trees Be Saved?

In cooperation with the USDA Forest Service and the International Society of Arboriculture.

A storm can leave trees looking like there's no tomorrow. Major limbs may be broken or damaged, foliage can be shredded or stripped, or the bark may be torn or gouged. But what at first glance may look like mortal wounds are not necessarily fatal to a tree. Trees have an amazing ability to recover from storm damage.

First, Assess the Damage

Before writing off a damaged tree as a “goner,” homeowners should evaluate their trees by asking the following questions:

- **Other than the storm damage, is the tree basically healthy and vigorous?** If the tree is basically healthy, is not creating a hazard, and did not suffer major structural damage, it will generally recover if first aid measures are applied immediately after the storm.
- **Are major limbs broken?** The larger a broken limb is, the harder it will be for the tree to recover from the damage. If a majority of the main branches are gone, the tree may have little chance of surviving.
- **Has the leader (the main upward-trending branch on most trees) been lost?** In species where a leader is important to upward growth or desirable appearance, it may have to be a judgment call. The tree may live without its leader, but at best would be a stunted or deformed version of the original.
- **Is at least 50 percent of the tree's crown (branches and leaves) still intact?** This is a good rule of thumb on tree survivability. A tree with less than half of its branches remaining may not be able to produce enough foliage to nourish the tree through another season.
- **How big are the wounds where branches have been broken or bark has been damaged?** The larger the wound is in relation to the size of the limb, the less likely it is to heal, leaving the tree vulnerable to disease and pests. A two- to three-inch wound on a 12-inch diameter limb will seal over with new bark within a couple of years.
- **Are there remaining branches that can form a new branch structure?** The remaining limbs will grow more vigorously as the tree tries to replace its missing foliage. Look to see if branches are in place that can eventually fill out the tree's appearance.
- **Is the tree of a desirable species for its location?** If the tree is in the wrong location (such as a potentially tall tree beneath a power line), or an undesirable species for the property (messy fruit, etc.), it may be best to remove it if it has serious damage.

Then, Make the Decision

The questions listed above will help you make informed decisions about your trees. In general, the answer as to what to do about a particular tree will fall into one of three categories:

1: It's a Keeper

If damage is relatively slight, prune any broken branches, repair torn bark or rough edges around wounds, and let the tree begin the process of wound repair.

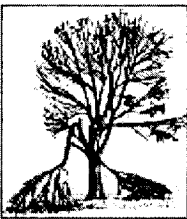
Some examples:



An Easy Call: (Illustration b1)

A mature shade tree can usually survive the loss of one major limb. The broken branch should be pruned back to the trunk. In the months to follow, large wounds should be closely monitored for signs of decay.

Illustration b1



Minor Damage: (Illustration b2)

Although the tree has been damaged, enough strong limbs may remain on a basically healthy tree to make saving it possible.

Illustration b2



Too Young to Die: (Illustration b3)

Young trees can sustain quite a bit of damage and still recover quickly. If the leader is intact and the structure for future branching remains, remove the broken branches and let the tree close over the wounds and recover itself.

Illustration b3

2: Wait and See

If a valuable tree appears to be a borderline case, resist the temptation to simply cut the tree down and be done with it. In such cases, it may be best to stand back for a while and think it over. Remember that time is on your side. After careful pruning of broken branches, give the tree some time to recover. A final decision can be made later.



Easy Does It: (Illustration b4)

Resist the temptation to prune too heavily. Remember that the tree will need all the foliage it can produce in order to make it through the next growing season. Remove only the damaged limbs, wait and see what happens.

Illustration b4

Hold Off: (Illustration b5)

A healthy mature tree can recover even when several major limbs are damaged. With large trees, a professional arborist should be brought in to assess damage on a borderline situation, and to safely accomplish needed pruning and branch removal.



Illustration b5

3: Say Goodbye

Some trees simply can't be saved or are not worth saving. If the tree has already been weakened by disease, if the trunk is split, or more than 50 percent of the crown is gone, the tree has lost its survival edge.

Tree Tragedy: (Illustration b6)

This otherwise healthy young tree has lost too much of its crown the leafy head that is vital for survival. It will probably not be able to grow enough new branches and leaves to provide needed nourishment, and will never be able to regain its former beautiful shape.



Illustration b6

Hopeless Case: (Illustration b7)

About all that's left of this tree is its trunk. The few remaining branches can't provide enough foliage to enable the tree to make it through another growing season.

Illustration b7



Fond Farewell to a Friend: (Illustration b8)

A rotten inner core in the trunk or structural weakness in branching patterns can cause a split trunk the tree equivalent of a heart attack. The wounds are too large to ever mend, and the tree has lost its sap lifeline between roots and leaves. This tree is all but dead.

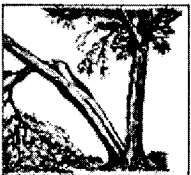


Illustration b8

Don't Try to Do It All Alone

Some of your trees may have damage that's too close to call, or may have hidden damage. To help with such questions, a tree professional may be needed to help you decide what to do about your trees. Don't hire just anyone who shows up at your door following a storm. Look for qualified arborists in the phone book or by contacting your state or city forester.

For free information about saving trees that have been damaged in a storm, send your name and address to:

The National Arbor Day Foundation, 100 Arbor Avenue, Nebraska City, NE 68410.

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Tree First Aid After a Storm

In cooperation with the USDA Forest Service and the International Society of Arboriculture

In the aftermath of a major storm, the initial impulse of property owners is generally along the lines of "let's get this mess cleaned up." But hasty decisions can often result in removing trees that could have been saved.

Doing the right things after trees have been damaged can make the difference between giving your trees a good chance of survival and losing them unnecessarily. The National Arbor Day Foundation urges home and property owners to follow a few simple rules in administering tree first aid after a storm:

1. **Don't try to do it all yourself.** If large limbs are broken or hanging, or if high climbing or overhead chainsaw work is needed, it's a job for a professional arborist. They have the necessary equipment and knowledge needed, and are generally listed in the telephone directory under "Tree Service."
2. **Take safety precautions.** Look up and look down. Be on the alert for downed power lines and dangerous hanging branches that look like they're ready to fall. Stay away from any downed utility lines, low-voltage telephone, or cable lines and even fence wires can become electrically charged when there are fallen or broken electrical lines nearby. Don't get under broken limbs that are hanging or caught in other branches overhead. And, unless you really know how to use one, leave chainsaw work to the professionals.
3. **Remove any broken branches still attached to the tree.** Removing the jagged remains of smaller sized broken limbs is one common repair that property owners can make after a storm. If done properly, it will minimize the risk of decay agents entering the wound. Smaller branches should be pruned at the point where they join larger ones. Large branches that are broken should be cut back to the trunk or a main limb by an arborist. For smaller branches, follow the pruning guidelines shown in the illustration so that you make clean cuts in the right places, helping the tree to recover faster (*see Illustration D1*).
4. **Repair torn bark.** To improve the tree's appearance and eliminate hiding places for insects, carefully use a chisel or sharp knife to smooth the ragged edges of wounds where bark has been torn away. Try not to expose any more of the cambium (greenish inner bark) than is necessary, as these fragile layers contain the tree's food and water lifelines between roots and leaves (*see Illustration D2*).
5. **Resist the urge to overprune.** Don't worry if the tree's appearance isn't perfect. With branches gone, your trees may look unbalanced or naked. You'll be surprised at how fast they will heal, grow new foliage, and return to their natural beauty.
6. **Don't top your trees!** Untrained individuals may urge you to cut back all of the branches, on the mistaken assumption that reducing the length of branches will help avoid breakage in future storms. While storm damage may not always allow for ideal pruning cuts, professional arborists say that "topping," cutting main

branches back to stubs, is one of the worst things you can do for your trees. Stubs will tend to grow back a lot of weakly-attached branches that are even more likely to break when a storm strikes. Also, the tree will need all its resources to recover from the stress of storm damage. Topping the tree will reduce the amount of foliage, on which the tree depends for the food and nourishment needed for regrowth. A topped tree that has already sustained major storm damage is more likely to die than repair itself. At best, its recovery will be retarded and it will almost never regain its original shape or beauty (*see Illustration D3*).

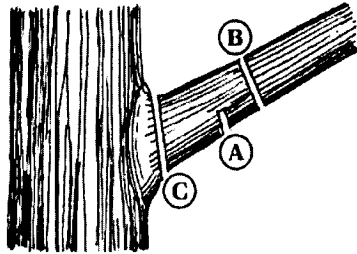


Illustration d1

Cutline: Because of its weight a branch can tear loose during pruning, stripping the bark and creating jagged edges that invite insects and disease. That won't happen if you follow these steps:

- A. Make a partial cut from beneath, at a point several inches away from the trunk.
- B. Make a second cut from above several inches out from the first cut, to allow the limb to fall safely.
- C. Complete the job with a final cut just outside the branch collar, the raised area that surrounds the branch where it joins the trunk.

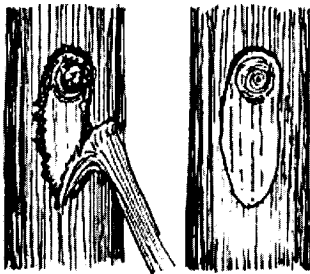


Illustration d2

Cutline: Smoothing the ragged edge of torn bark helps the wound heal faster and eliminates hiding places for insects.

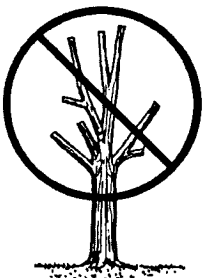


Illustration d3

Cutline: Never cut the main branches of a tree back to stubs. Ugly, weakly attached limbs will often grow back higher than the original branches and be more likely to break off in a future storm.

Watch Out for Scam Artists Posing as Arborists

After a storm, it is common for people claiming to be tree specialists to show up at your door offering their services to remove or repair trees. In the words of one city forester: "They seem to come out of the woodwork—people we have never even heard of before."

Unfortunately, many such individuals have little or no training, and sometimes have little interest in removing anything but money from the pocketbooks of unsuspecting residents.

The National Arbor Day Foundation urges you to not be a victim. "Make sure you are dealing with a reputable individual or tree care firm when you contemplate repairs or removal of any trees on your property," warns John Rosenow, president of The National Arbor Day Foundation. "Legitimate arborists rarely go door to door to solicit business."

Here are eight guidelines to help you find qualified tree-care specialists:

1. Make sure they are part of an established business in the community or nearby area, with a listing in the phone book, usually under Tree Service.
2. Have them provide you with evidence that they are actually working for the company, rather than moonlighting.
3. Ask for current certificates of insurance showing that they are fully insured for property damage, personal liability, and worker compensation.
4. Ideally, they should be members of a professional association of arborists such as the International Society of Arboriculture (ISA), the National Arborist Association (NAA), or the American Society of Consulting Arborists (ASCA).
5. Arborists who have received certification from their professional associations, such as ISA Certified Arborists, will have received training and access to current technical information on tree care, repair, and removal.
6. If possible, get more than one estimate to ensure that the price offered is competitive with that offered by others for the same services.
7. In case of tree removals, have a clear understanding about who removes the limbs and debris from the property, and whether or not the price includes stump removal and clean up.
8. Check to see if the estimate has considered the possible value your tree will have as firewood or chips, either to yourself or if sold to others.

"Above all, don't be pressured into making a decision," Rosenow warns. "Taking the time to select a qualified tree professional can safeguard your trees and save you from the long-term consequences of wrong decisions about what to do about them after a storm."

Special note for victims of large-scale disasters.

During large-scale disasters — such as the aftermath of Hurricane Katrina in August, 2005 — many arborists from around the country may travel to help aid in recovery from widespread, catastrophic damage. In these special cases, it may not be practical to use a local professional. In addition, professional arborists may very well be knocking on doors as they participate in coordinated efforts to canvas large areas.

Ask for proof of insurance. The insurance certificate will list a company name that you can call directly for verification.

Number eight may not apply. There may be so many trees to remove that the value of trees for firewood or chips may be drastically reduced.